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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,060

02/25/2004

Jim Threlkeld

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
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ALEXANDRIA, VA 22314

EXAMINER

MERCIER, MELISSA S

ART UNIT

PAPER NUMBER

1615

NOTIFICATION DATE

DELIVERY MODE

03/04/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/785,060	Applicant(s) THRELKELD ET AL.	
	Examiner MELISSA S. MERCIER	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-31, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-31, 33 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1-13-10, 2-3-10</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 13, 2010 has been entered.

Summary

Claims 19-31 and 33-34 remain pending in this application. Applicant has cancelled claims 1-18 and 32.

Information Disclosure Statement

Receipt of the Information Disclosure Statements filed on January 13, 2010 and February 3, 2010 is acknowledged. Signed copies are attached to this office action.

Maintained Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1615

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-31 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omura et al. (US Patent 6,384,254) in view of Smith III et al. (US Patent 6,759,127).

Omura teaches a fiber or fabric treating agent composition comprising the quaternary ammonium salt-containing polysiloxane as a main component. "A variety of fibers and fibrous materials can be treated with fiber or fabric treating agent composition, by adjusting the emulsion of the composition to a suitable concentration, and applying the emulsion to fibers or fabrics as by dipping, spraying or roll coating. As a general rule, an appropriate coating weight of the quaternary ammonium salt-containing polysiloxane is about 0.01 to 10% by weight based on the weight of the fibers or fabric. The coated fabrics are then dried by hot air blowing or in a heating furnace. The drying conditions include about 100-150 degrees C" (column 8, lines 4-18). The recitation of about 100C and Omura's additional disclosure that drying temperature can be modified based on the type of fibers and fabrics used would allow one of ordinary skill in the art to optimize the temperature in order to dry the fabric. Thereby providing motivation to alter and optimize the temperature based on the specific fabric and drying time. It is further noted that no time limit has been set for the drying step. It is therefore the position of the examiner that since Omura discloses a time limit, it would have been within the knowledge of the skilled artisan to adjust the time needed to ensure drying. It would have been obvious to one of ordinary skill in the art to have increased the drying

Art Unit: 1615

time utilizing a lower temperature, or vice versa, lower the drying time by increasing the temperature.

Omura does not disclose the specific composite yarn or articles and reusing the bath in order to treat a second item.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used any fabric which would be desirable to have antimicrobial properties. The claims are drawn to a method of providing antimicrobial properties. there is no teaching in the prior art that would lead one of ordinary skill in the art to believe that been able to treat yarns and articles would not be attainable when following the method steps of the instant claims.

Since Omura discloses the same compound, in the same amount, utilizing the same method of application steps, it is the position of the examiner that the final product would possess the same functional limitations as the instantly claim, (i.e. wherein the resulting composite item retains antimicrobial properties for at least 40 wash cycles). The USPTO does not possess laboratory facilities. The burden is on applicant to provide evidence as to the lack of functional properties when the same method and composition is disclosed in the prior art.

It would have been obvious to a person of ordinary skill in the art to reuse the bath in order to treat a second item. The limitation of “reusing the bath in a further immersing step on a second composite item” is with the knowledge of one of ordinary skill in the art.

Art Unit: 1615

Applicant is reminded that where the general conditions of the claims are met, burden is shifted to applicant to provide a patentable distinction. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. See *In re Aller*, 220 F.2d 454 105 USPQ 233,235 (CCPA 1955).

Omura additionally does not disclose a copolymer of a long chain (C_{12} to C_{20}) alkyldimethylaminotrihydroxysilylpropyl ammonium halide and a chloroalkyltrihydroxysilane.

Smith discloses a textile article having flame resistant properties. Smith also teaches “for those cases where antimicrobial properties are desired, an antimicrobial agent is added to the chemical treatment. Smith’s preferred antimicrobial agent is an organosilane composition comprising about 16% by weight of chloropropyltrihydroxysilane and about 84% by weight of Octadecylaminodimethyltrihydroxysilylpropyl Ammonium Chloride, available from Aegis under the trademark AEM 5700. Applicant’s specification discloses, “particularly preferred for use as the antimicrobial agent is a copolymer (which may or may not include partially or fully hydrolyzed forms) of octadecylaminodimethyltrihydroxysilylpropyl ammonium chloride and chloropropyltrihydroxysilane. Suitable such antimicrobials include, the antimicrobial agents from Aegis Environments such as AEM 5700 Antimicrobial, AEM 5772 Antimicrobial and AEGIS Antimicrobial” (page 6, lines 4-11).

Art Unit: 1615

It is generally considered to be prime facie obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose in order to form a composition that is to be used for an identical purpose. The motivation for combining them flows from their having been used individually in the prior art, and from them being recognized in the prior art as useful for the same purpose. As shown by the recited teachings, instant claims are no more than the combination of conventional components of antimicrobial agents. It therefore follows that the instant claims define prime facie obvious subject matter. Cf. In re Kerhoven, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues:

I. the present method provides the ability to complete the treatment using a drying process at temperatures of no more than 90C;

As was discussed above in the rejection over Omura, it would have been obvious to one of ordinary skill in the art to utilize a lower temperature in order to dry the fabrics. The instant claims do not have a time limit as to the drying step; therefore, it would be well within the knowledge of the skilled artisan to use a lower temperature for a longer time or a higher temperature for a short time. Further, Omura discloses temperatures of about 100C. It is the position of the Examiner that 90C would read on about 100C. Further there is no evidence supplied by Applicant to indicate that a slight increase in temperature chemically alters the compounds used or their effectiveness.

The rejections under 35 USC 103 are therefore maintained.

Response to Amendment

The Declaration under 37 CFR 1.132 filed January 13, 2010 is insufficient to overcome the rejection of claims 19-31 and 33-34 based upon being unpatentable over Omura et al. (US Patent 6,384,254) in view of Smith III et al. (US Patent 6,759,127) as set forth in the last Office action because:

The Declaration does not provide a side by side comparison of the prior art reference. It is merely additional experimental results obtained from performing the instantly claimed method. It does not address the issue of drying time or temperature in comparison to what is disclosed in the Omura reference. It appears the Declaration is referring to the process of Smith and not Omura. It is unclear to the Examiner whether this is a typographical error.

Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1615

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA S. MERCIER whose telephone number is (571)272-9039. The examiner can normally be reached on 8:00am-4:30pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571) 272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa S Mercier/
Examiner, Art Unit 1615

/Carlos A. Azpuru/
Primary Examiner, Art Unit 1615